



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,010	07/25/2001	Jogen Pathak	24148115.9A	5165

7590 03/25/2005

R. SCOTT RHOADES, STRASBURGER
& PRICE, LLP
901 MAIN STREET
SUITE 4300
DALLAS, TX 75202-3794

EXAMINER

GOLD, AVI M

ART UNIT	PAPER NUMBER
----------	--------------

2157

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/915,010

Applicant(s)

PATHAK ET AL.

Examiner

Avi Gold

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/3/03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

This action is responsive to the application filed July 25, 2001. Claims 1-20 are pending. Claims 1-20 represent a system, method, and apparatus for preventing data packet overflow at node in wireless packet data services network.

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c). The second inventor has changes to the address that are not dated.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claim 10 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 10 recites the limitation "the first node". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-5, 9-13, and 16-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Schmidt et al., U.S. Patent No. 6,215,994.

Schmidt teaches the invention as claimed including programming mobile stations with user specific information (see abstract).

Regarding claim 1, Schmidt teaches a method for controlling data transmission from a server to a wireless client, said method comprising:

estimating an amount of available memory allocated for the wireless client at a node (col. 3, line 62 – col. 4, line 4, Schmidt discloses a remote mobile station for use in a wireless communication system including memory; col. 10, lines 38-44, Schmidt discloses an amount of bytes generally allocated in memory);

receiving a message from the wireless client which includes a field that indicates the amount of available memory at the wireless client (col. 6, lines 29-37, Schmidt discloses a group memory allocation initial setup; col. 9, lines 33-45, Schmidt discloses a group memory allocation field); and

Art Unit: 2157

replacing the field with the amount of available memory allocated for the wireless (col. 9, lines 55-59, Schmidt discloses allocating more data if needed and updating the field).

Regarding claim 2, Schmidt teaches the method of claim 1, wherein estimating the amount of available memory allocated for the wireless client at the node further comprises:

estimating an amount of memory at the node allocated for the wireless client which is used (col. 10, lines 38-44); and

subtracting the estimated amount of memory allocated at the node for the wireless client which is used from an amount of memory allocated at the node for the wireless client (col. 9, line 33 – col. 10, line 44).

Regarding claim 3, Schmidt teaches the method of claim 2, wherein subtracting further comprises:

receiving a message from the node, wherein the message includes a downlink buffer size field (col. 9, lines 33-45, lines 55-59, Schmidt discloses the size of field returned); and

subtracting the estimated amount of memory allocated at the node for the wireless client which is used from the downlink buffer size (col. 9, line 55 – col. 10, line 44).

Art Unit: 2157

Regarding claim 4, Schmidt teaches the method of claim 3, wherein receiving a message from the node comprises: receiving a link layer control message from the node (col. 10, lines 27-44, Schmidt discloses a user preference program finding out about the use of memory locations).

Regarding claim 5, Schmidt teaches the method of claim 2, wherein estimating an amount of memory at the node allocated for the wireless client which is used, further comprises:

counting data packets which are received from the node for the wireless client (col. 9, lines 28-45, Schmidt discloses a transmitted standard information field);

receiving a signal which indicates a number of data packets which are received at the node for the wireless client (col. 9, lines 28-45, Schmidt discloses receiving a signal which includes fields that indicate data packets received); and

subtracting the number of data packets which are received from the node from the data packets which are received at the node (col. 9, lines 28-45).

Regarding claim 9, Schmidt teaches a system for controlling transmission between a server and a wireless client, said system comprising:

a processor for estimating an amount of available memory allocated for the wireless client at a node (col. 3, line 62 – col. 4, line 4, col. 10, lines 38-44);

a first port for receiving a message from the wireless client, said message including a field indicating the available memory at the wireless client (col. 9, lines 33-45); and

a second port for transmitting the message to the content server, wherein the field indicating the available memory at the wireless client includes an indicator which indicates the estimated amount of available memory allocated for the wireless client at the node (col. 9, lines 55-59).

Regarding claim 10, Schmidt teaches the system of claim 9, wherein the system comprises: a third port for receiving data packets from the node to the wireless client (col. 10, lines 27-44, Schmidt discloses standard memory locations transmitted).

Regarding claim 11, Schmidt teaches the system of claim 9, wherein the first node transmits data packets to the node (col. 10, lines 27-44).

Regarding claim 12, Schmidt teaches the system of claim 9, further comprising:
a first memory for counting the number of data packets transmitted to the node for a particular client (col. 9, lines 28-45); and
a second memory for counting the data packets transmitted from the node to the particular wireless client (col. 9, line 55 – col. 10, line 44).

Art Unit: 2157

Regarding claim 13, Schmidt teaches the system of claim 12, wherein the system receives a message from the node to the wireless client, said message including a downlink buffer size field, and wherein the system further comprises:

a third memory for storing the downlink buffer size field (col. 9, line 55 – col. 10, line 44).

Regarding claim 16, Schmidt teaches an apparatus for controlling transmission of data from a content server to a wireless client, said apparatus comprising a computer readable medium for storing a plurality of executable instructions, said plurality of instructions comprising:

estimating an amount of available memory allocated for the wireless client at a node (col. 3, line 62 – col. 4, line 4, col. 10, lines 38-44);

replacing a field in a message from the wireless client which that indicates the amount of available memory at the wireless client with the amount of available memory allocated for the wireless client at the node; and

transmitting the message to the node (col. 9, lines 28-45, lines 55-59).

Regarding claim 17, Schmidt teaches the apparatus of claim 16, wherein the instructions comprising estimating the amount of available memory allocated for the wireless client at the node further comprise:

estimating an amount of memory at the node allocated for the wireless client which is used (col. 10, lines 38-44); and

subtracting the estimated amount of memory allocated at the node for the wireless client which is used from an amount of memory allocated at the node for the wireless client (col. 9, line 33 – col. 10, line 44).

Regarding claim 18, Schmidt teaches the apparatus of claim 17, wherein the instructions for subtracting further comprise:

subtracting the estimated amount of memory allocated at the node for the wireless client which is used from a downlink buffer size field contained in a link layer control message transmitted from the node to the wireless client (col. 9, line 33 – col. 10, line 44).

Regarding claim 19, Schmidt teaches the apparatus of claim 17, wherein the instructions for estimating an amount of memory at the node allocated for the wireless client which is used, further comprises:

counting data packets which are received from the node for the wireless client;

counting data packets which are received at the node; and

subtracting the number of data packets which are received from the node from the data packets which are received at the node (col. 9, lines 28-45).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6-8, 14, 15, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt further in view of Kalliokulju et al., U.S. Patent No. 6,717,928.

Schmidt teaches the invention substantially as claimed including programming mobile stations with user specific information (see abstract).

As to claims 6 and 13, Schmidt teaches the method and system of claims 1 and

9.

Schmidt fails to teach the limitation further including the use of SGSN.

However, Kalliokulju teaches a method and system for controlling data transmission with connection states (see abstract). Kalliokulju teaches the use of SGSN with memory (col. 12, lines 56-60).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Schmidt in view of Kalliokulju to use SGSN. One would be motivated to do so because SGSN is a known type of support node in the art.

As to claims 7, 8, 15, and 20, Schmidt teaches the method, system, and apparatus of claims 1, 9, and 16.

Schmidt fails to teach the limitation further including the use of acknowledgements.

However, Kalliokulju teaches a method and system for controlling data transmission with connection states (see abstract). Kalliokulju teaches the use of acknowledgements (col. 5, lines 49-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Schmidt in view of Kalliokulju to use an acknowledgement. One would be motivated to do so because they allow a sender to know if their data packets were received or not.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 5,621,798 to Aucsmith

U.S. Pat. No. 6,393,470 to Kanevsky et al.

U.S. Pat. No. 5,604,869 to Mincher et al.

U.S. Pat. No. 6,460,085 to Toporek et al.

U.S. Pat. No. 6,741,863 to Chiang et al.

U.S. Pat. No. 6,680,930 to Newberg et al.

U.S. Pat. No. 6,721,787 to Hiscock

U.S. Pat. No. 6,574,668 to Gubbi et al.

U.S. Pat. No. 6,748,403 to Lemke


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avi Gold whose telephone number is 571-272-4002.

The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Avi Gold
Patent Examiner
Art Unit 2157



SALEH NAJJAR
PRIMARY EXAMINER

AMG